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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,604	04/02/2004	Gary L. White	370002-00080 CIP	3127

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ECKERT SEAMANS CHERIN & MELLOTT
600 GRANT STREET
44TH FLOOR
PITTSBURGH, PA 15219

EXAMINER

CHIMIAK, EMILY ANN

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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10/23/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/817,604	Applicant(s) WHITE ET AL.	
	Examiner Emily Chimiak	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Gray, III (US 4327121).

As to claim 1, Gray, III discloses casting one or more lamina including polyvinyl chloride, polyurethane (binder) and pigment onto a strippable sheet to make a transferable printed design, and curing the design. The casting is provided with the surface effect which is the reverse of the release surface. Gray, III. discloses that it is known in the art to impart to the surface of the plastic material the quality of finish of the release surface, such as a textured (matte) surface i.e. employing the texture of the support surface to provide the first surface with a matte finish (col. 1 lines 18-21, col. 2 lines 62-65, col. 4 lines 25-30 and col. 5 lines 10).

It is noted that the flowable initial material is consolidated under heat and pressure; electron beam radiation is only utilized to prepare the support surface (col. 4 lines 5-13).

As to claim 2, when a textured base is supplied, the side of the casting that does not contact the base will have a glossier finish (col. 2 lines 60-63).

As to claim 5, the method disclosed by Gray, III. produces a strippable sheet (col. 4 lines 29-32).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 3, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burgess et al. (US 20020178574) in view of Grey, III.

As to claim 1, Burgess et al. teaches casting plastisol (pigments and binder) onto a transfer sheet, fusing the plastisol into a sheet and stripping the transfer sheet from the PVC sheet (paragraph 0055). It is noted that the PVC sheet is suitable for use on a building and that the surface of cast plastisol 43 that contacts transfer sheet 41 is the first surface.

Burgess et al. teaches using roll 46 to emboss the sheet of plastisol, but does not teach employing the texture of the support surface to provide the first surface with a matte finish when the coloring material is removed from the substrate.

However, Gray, III. discloses that it is known in the art to impart to the surface of the plastic material the quality of finish of the release surface (col. 1 lines 18-21).

It would have been obvious to one of ordinary skill in the art at the time of invention to provide a matte finish to the PVC sheet of Burgess et al. by using a textured release surface as taught by Grey, III.

As to claim 3, Burgess et al. discloses fusing the particles of PVC in the binder under heat i.e. curing the flowable initial material and heating the flowable initial material and fusing together the plastic particles (paragraph 0055).

As to claim 4, the plastisol is cast onto a transfer sheet that is drawn off of a supply roll 42 (a web). In one embodiment, the transfer sheet is paper (paragraph 0054 and paragraph 0070, claim 10).

As to claim 5, the PVC sheet may be separated from the transfer sheet (paragraph 0055).

6. Claim 15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray, III. in view of Bull et al. (US 6254711).

As to claim 15, Gray, III. discloses a cast film of more than one lamina in a consolidated decorative laminate (applying onto a support surface a first and second flowable initial material). The cast film is comprised of polyvinyl chloride plastisol, i.e. the first and second binders

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include a plastisol (col. 4 lines 1-30). It is noted that a heat transferable printed design requires the first coloring material to be embedded into the second and that the decorative laminate may be used to form a laminated plastic building panel.

It is noted that the flowable initial material is consolidated under heat and pressure (col. 4 lines 5-13).

Gray, III does not disclose at least partially curing the first flowable material prior to applying the second.

However, Bull et al. discloses a method of making a transferable coloring sheet where pigment layers can be applied in successive lamination steps (col. 8 lines 48-50).

It would have been obvious to one of ordinary skill in the art at the time of invention to apply the pigment layers in one or several successive lamination steps as taught by Bull et al. depending on the intended application and the desired effect.

As to claim 17, Gray, III. discloses applying cast films that form a heat transferable printed design, i.e. applying the first flowable material onto the support surface according to a predetermined pattern (col. 4 lines 25-29).

As to claim 18, Gray, III. does not disclose two different colors in the heat transferable printed design.

However, Bull et al. discloses one black layer and one white layer in order to make one side of the transferable coloring sheet light reflecting and one light absorbing (col. 6 lines 25-44).

It would have been obvious to one of ordinary skill in the art at the time of invention to use a different pigment for the first and second cast films of Gray, III. in order to produce a light reflecting side and a light absorptive side of the colorant transfer component as taught by Bull et al.

7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray III. and Bull et al. as applied to claim 15, and further in view of P.P.A. Burnett (US 2874416).

Gray, III. as modified above does not disclose performing all of the steps in a single inline process.

However, P.P.A. Burnett discloses coating a release sheet comprised of polyvinyl chloride onto a paper roll with three resinous layers that is printed with rollers and heated between coatings, i.e. at least partially curing the first flowable material prior to applying the second, and performing all of the steps in a single inline process (col. 2 lines 50-67 and col. 3 lines 1-60).

It would have been obvious to one of ordinary skill in the art at the time of invention to perform all of the steps in a single inline process with curing between layers in order to form products in rolls that are convenient for handling as taught by P.P.A. Burnett.

Response to Arguments

9. Applicant's arguments filed 08/13/2007 have been fully considered but they are not persuasive.

As to the argument regarding Grey III., it is noted that the flowable initial material is consolidated under heat and pressure; electron beam radiation is only utilized to prepare the support surface (col. 4 lines 5-13 in Gray, III and the rejection of claim 1 above).

As to the argument regarding Burgess '574, it is noted that Burgess is not used to address curing or the matte finish. Even so, Burgess '574 addresses curing. Applicant discloses that when curing PVC "Such curing may, for instance, occur by passing the coloring material through an oven at a temperature in the range of about 375°-425° for an appropriate duration of time to fuse together the plastic particles thereof" (See [0051], [0052] and [0054] of US2005/0003154. Burgess et al. also discloses fusing particles of PVC in the binder under heat (see rejection above).

The arguments regarding Bull and Brunett are addressed in the same way; neither reference was relied on for meeting the limitation of curing. However, Bull et al. discloses crosslinking (curing) the binder in the color layers (see col. 7 lines 35-54 of Bull et al.) and Burnett discloses "fusing" the layers in an oven, (see col. 3 lines 47-65 of Burnett) which is applicant's definition of curing as mentioned in the paragraph above.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Chimiak whose telephone number is (571)272-6486. The examiner can normally be reached on Monday-Friday 8:30-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)272-6486. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



EAC



RICHARD CRISPINO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER